Deutsche Bank
Research Institute

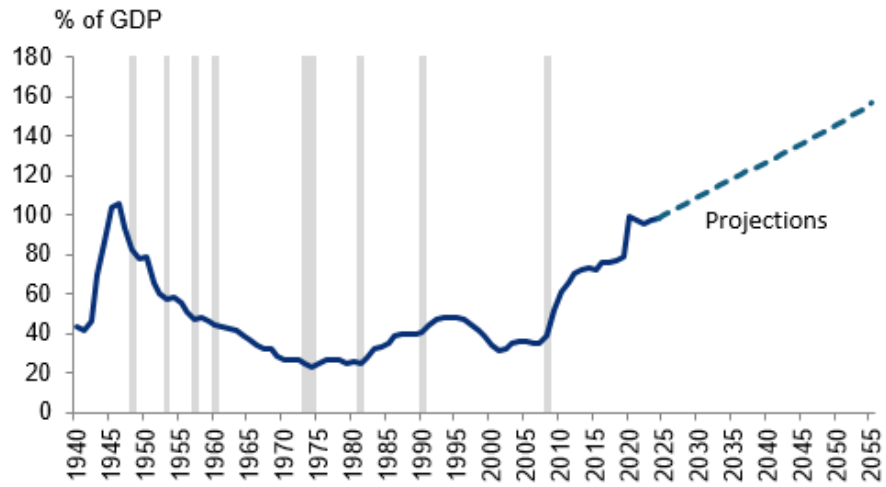
Omnia debita solventur?

October 22, 2025

Introduction

Gross federal debt is on the cusp of breaching 100% of GDP for the first time since WWII[1]. By the end of the decade, the Congressional Budget Office (CBO) – the independent agency charged with making projections of the government deficit and debt -- projects that this measure of indebtedness will rise to a record high level, exceeding the 106.1% registered in 1946. The picture looks worse the further into the future you look. By the year 2055, current baseline projections are for gross federal debt held by the public as a share of GDP rising to about 150%, exceeding that 1946 record high by roughly half the size of the US economy.

Figure 1: US debt-to-GDP is near record highs and projected to rise further



Source : CBO, Haver Analytics, Deutsche Bank Research

This expectation for ever-rising US government indebtedness is the opposite of the post-WWII era when debt-to-GDP collapsed by about 80 percentage points by the mid-1970s. In this note, we assess what went right during that period – what explains the remarkable decline in debt between the 1940s and 1970s – and leverage this viewpoint to assess how the US might be able to achieve meaningful debt consolidation over the coming years / decades.

As we discuss, the international historical record provides plenty of examples of debt consolidation. The drivers of these episodes have varied over time – most often some combination of fiscal policy changes and strong economic growth improved debt metrics. On some occasions surprise inflation shocks and low interest rates / financial repression also played roles.

[1] Gross federal debt held by the public is all federal debt, including what is held by the Federal Reserve, but excluding intragovernmental debt. Although total gross federal debt is most often used in international comparisons, we refer to this metric throughout as it provides a more accurate picture of the indebtedness of the federal government to all other parties.

Authors

Matthew Luzzetti, Ph.D.
Chief US economist

Brett Ryan
Senior US Economist

Justin Weidner
Economist

Amy Yang
Economist

Deutsche Bank
Research Institute

However, the current outlook is more fraught. There appears to be limited appetite for policy changes that reduce deficits in Washington, absent market pressures; real economic growth is likely to be slower than much of history, even if AI boosts productivity; and inflation over the past five years has proven to be politically toxic. With this backdrop, it makes sense for the administration to put some focus on levers to increase demand for US Treasuries to keep borrowing costs as low as possible.

How did we get here?

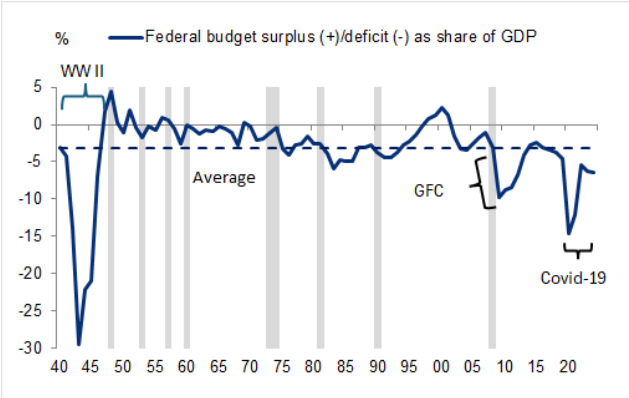
Although elevated debt loads feel like they have been a perpetual source of consternation in the US, the urgency of these concerns is a relatively recent development. After surging to 106% in 1946, debt-to-GDP plunged to around 25% by the mid-1970s before doubling to a still historically manageable level of 50% in 1995 – right around the long-term average at the time.

But in the late 1990s the federal budget deficit reached a surplus for the first time since the years just after WWII. This switch from deficit to surplus briefly raised concerns that US Treasury paper could dry up, leaving a dearth of the safe assets that had become critical to the plumbing of the global financial system.

That several year period of positive fiscal news in the 1990s was driven by several factors. First, the information and communications technologies (ICT) revolution, which led to a sustained period of robust economic growth and, in turn, improved revenues. Second, a positive boost to the labor supply also culminated over this period, with the labor force participation rate hitting record high levels driven importantly by a steady increase in female participation. Finally, inflation-adjusted federal government defense spending declined by roughly 25% between 1989 and 1998 following the collapse of the Soviet Union, a parallel to the earlier period following the Vietnam War when a retrenchment in defense spending aided debt consolidation.

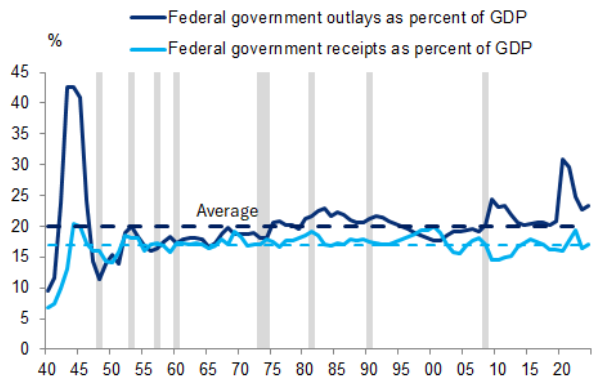
As a result, federal government revenue as a share of GDP reached 20% for the first time on record in 2000, while federal government outlays as a share of GDP dropped below 18% for first time since the 1960s.

Figure 2: The history of US federal budget deficit as a share of GDP



Source : CBO, Haver Analytics, Deutsche Bank Research

Figure 3: Federal outlays and receipts as a share of GDP



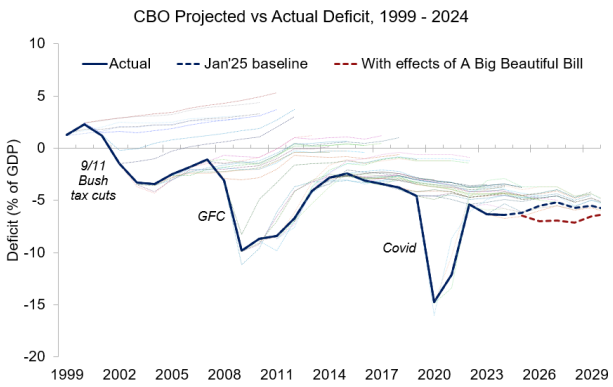
Source : CBO, Haver Analytics, Deutsche Bank Research

Since that brief period of budget surpluses in the late 1990s, US debt-to-GDP has been on a relentless push higher. This rise has occurred in several discrete episodes around recessions. The Global Financial Crisis (GFC) produced a surge in debt-to-GDP from 35% to 60% over the 2007 to 2010 period. The Covid-19 crisis then produced a nearly 20 percentage point jump in debt-to-GDP, which spiked from 79% to 99% between 2019 and 2020. Together, over those five years

– between 2007 and 2010 and 2019 and 2020 – debt-to-GDP rose a cumulative 45 percentage points, explaining nearly 70% of the total rise over this period.

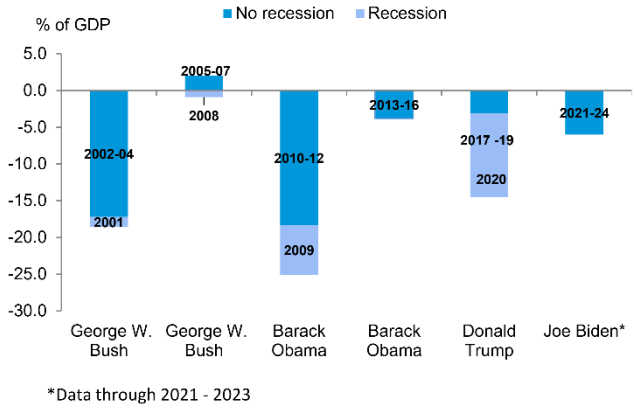
But recessions are not the sole reason for the rise in US debt loads since the trough in the 1970s. Indeed, the budget deficit-to-GDP ratio has consistently run higher than the CBO's ex-ante projections, even outside of recessions. Changes in fiscal policies explain some of this deviation. On the revenue side, the initiation and eventual extension of key tax cuts have pushed debt higher – the Bush tax cuts in the early 2000s are estimated to have added $3.3 trillion to US debt through the-mid 2010s (see here), and the Trump tax cuts passed in 2017 added another $1.5 trillion over the first decade (see here). On the spending side, two wars in Iraq and Afghanistan cost taxpayers over $1.6 trillion between FY 2001 and FY 2021 (see here). Obama's passage of the Affordable Care Act added ~$500 billion to US debt over the first decade (see here), and Biden's Build Back Better package of 2021 added another $2.9 trillion including presumed extensions (see here). As Figures 4 and 5 demonstrate, delivering budget deficits that are wider than the CBO forecasts has been a bipartisan regularity over the past three decades.

Figure 4: Federal budget deficits have been consistently larger than the CBO projected in recent decades



Source : CBO, Haver Analytics, Deutsche Bank Research

Figure 5: Wider deficits have been across administrations and occurred in both recession and non-recession periods



*Data through 2021 - 2023

Source : CBO, Haver Analytics, Deutsche Bank Research

How did the US get its house in order after WWII?

After federal debt held by the public as a share of GDP peaked at 106% in 1946, it then collapsed over the next three decades. In 1956, just ten years after the apex was reached, debt-to-GDP had more than halved, falling to 50.6%. By the mid-1970s, debt-to-GDP halved once again, reaching lows around 25% around that period.

How did the US pull off this remarkable debt consolidation? This question has been a popular topic for academics for some time. The primary drivers fall into four broad categories:

1. Changes to fiscal policies (i.e., tax and spending) that reduce budget deficits / raise budget surpluses. On the spending side, large shifts in defense have historically played a significant role.
2. Strong real economic growth that improves tax revenues and reduces spending on cyclical items,
3. Unanticipated inflation that erodes the real value of debt, and
4. Low interest rates / financial repression, which keep the interest cost of debt artificially low

Academic research has found that, to varying degrees, each of these levers likely played an important role in reducing the debt-to-GDP ratio following WWII.

In recent work, Acalin and Ball (2023) emphasize the importance of improvements in fiscal policies and financial repression – e.g., the Fed keeping rates pegged at artificially low levels from 1942 until the Fed-Treasury Accord of 1951 – which together they find account for 51 percentage points of the 83 percentage point reduction in debt-to-GDP over this period. Eichengreen and Esteves (2022) conclude that inflation has generally not been a robust contributing factor to debt reduction across countries over time, and that for the US experience fiscal policy changes and real growth were most important. Hall and Sargent (2011) find that fiscal policies and real economic growth accounted roughly equally for 80% of the reduction in debt-to-GDP over this period. The results from this academic work are summarized in Figure 6.

Figure 6: Summary of academic findings on how US debt-to-GDP fell after WWII

Factor	Estimated Contribution to Debt/GDP Decline	Midpoint	Time Period	Citations
Growth	26-40%	33%	26% from 1946-1974 39% from 1947-1956 40% 1946-1974	Acalin and Ball (2023) Eichengreen and Esteves (2022) Hall and Sargent (2011)
Budget Surpluses	20-44%	32%	20% from 1946-1974 44% from 1947-1956 40% from 1946-1974	Acalin and Ball (2023) Eichengreen and Esteves (2022) Hall and Sargent (2011)
Inflation	10 – 48%	29%	48% from 1947-1956 ½ of 20% from 1946 -1974	Eichengreen and Esteves (2022) Hall and Sargent (2011)
Financial repression/ interest rates	10-33%	22%	33% from 1946-1974 ½ of 20% from 1946 – 1974 27% from 1947-1956	Acalin and Ball (2023) Hall and Sargent (2011) Eichengreen and Esteves (2022)

Source: Acalin and Ball (2023), Eichengreen and Esteves (2022), Hall and Sargent (2011), Deutsche Bank Research

Taken together, these papers find that debt-to-GDP was brought to heel over the 1940s through 1970s from a combination of all four factors. The midpoint of the ranges derived from the preceding literature suggests roughly 2/3 of the decline in debt-to-GDP was explained equally by fiscal policies and real GDP growth. Somewhat less (29%) is explained by inflation, though the range is particularly wide for this variable -- as little as 10% to as much as 50%. Finally, financial repression / low interest rates were likely the least important factor. The midpoint is about 20%, though the range is wide for this category as well.

The role of defense spending should be highlighted. As the US withdrew from the Vietnam War, real defense spending dropped 30% from 1968 through 1978. As a share of nominal GDP, defense spending declined from 11% in 1967 to 6% by the end of the next decade. That share was a record low in the post-WWII era, up until the more significant decline in the second half of the 1990s following the Cold War, which helped to temporarily lift the US budget into surplus.

In summary, this research suggests that large and sustained reductions in debt likely require a lot to go right across fiscal policy decisions, growth, inflation and interest rates, at least through the lens of the post-WWII experience in the US.

What does an international perspective suggest?

The US history over the past 100 years has only one example of a substantial debt consolidation from levels that are this elevated. However, the global record has far more experience with large-scale reductions in debt-to-GDP ratios that can help to inform what a successful approach to bringing down debt might look like.

Eichengreen and Esteves (2022) provide a comprehensive assessment of the international experience. The authors consider the largest debt consolidations across economies, defined as periods of at least ten years where debt-to-GDP falls by at least 15 percentage points. They identify thirty episodes, of which the post-WWII US experience is one. The authors then utilize their methodology to decompose the reduction in debt into the primary forces mentioned previously – fiscal policy changes, real economic growth, interest rates and inflation. We present their results and also summarize the findings across these thirty episodes by taking the average and key percentiles across the distribution.

Figure 7: 30 Largest Debt Consolidations (10 years with Debt/GDP falling by at least 15% of GDP)

Country	Start	End	ΔDebt (% GDP)	Primary Balance (1)	Interest Rate (Nominal) (2)	Real Growth (3)	Inflation (4)	Real interest rate ((2)+ (4))
UK	1947	1956	-130.7	19.6	-32.1	25.6	80.7	48.6
Syria	2001	2010	-122.1	-14.5	-6.5	28.1	32.4	25.9
Kuwait	1992	2001	-116	69.7	-39.6	96.8	9	-30.6
Saudi Arabia	2003	2012	-93.3	157.8	-15.3	24.3	7.1	-8.2
Bulgaria	1997	2006	-87.8	44.1	-37.3	15.6	161.1	123.8
USA	1947	1956	-65.8	43.8	-26.8	39.3	47.9	21.1
Malaysia	1988	1997	-65.4	72.1	-63.8	79.7	28.2	-35.6
W. Samoa	1995	2004	-58	-7.2	-79.7	43.3	32	-47.7
Australia	1947	1956	-55.1	30.9	-16.5	44.3	83.7	67.2
New Zealand	1950	1959	-54.3	33.9	-21.5	69.4	81	59.5
Switzerland	1946	1955	-51.8	39.1	-27.3	43.4	11.9	-15.4
Ireland	1996	2005	-48.5	77.2	-44.3	71.4	26.8	-17.5
Spain	1903	1912	-47.4	77.4	-70.4	32.1	10.7	-59.7
UK	1958	1967	-41.1	32.5	-82.2	68.5	63.7	-18.5
Argentina	1898	1907	-39.2	28.6	-72	69.5	-8.3	-80.3
Uzbekistan	2002	2011	-38.5	105.7	-8.3	28.3	68.3	60
Comoros	1996	2005	-38	-49.7	-24.9	35.7	47.5	22.6
Sweden	1998	2007	-37.7	101.2	-69.4	55.6	18.3	-51.1
Thailand	1987	1996	-36.5	78.5	-38.5	48.3	22	-16.5
Turkmenistan	1999	2008	-36	94.4	-17.2	50.8	42.8	25.6
India	1934	1943	-33.4	17.1	-45.9	14.3	92.9	47
France	1947	1956	-33.1	-121.3	-29.9	65.8	184.3	154.4
Eswatini	1986	1995	-33	49.7	-22.3	55.9	90.9	68.6
Australia	1933	1942	-32.9	63.6	-77.4	131	59.8	-17.6
UK	1969	1978	-32.8	49.7	-114.5	34.1	158.7	44.2
UK	1859	1868	-32.8	96.1	-100.8	51	17.4	-83.4
Belgium	1996	2005	-32.8	133.6	-179.7	71.5	56.8	-122.9
New Zealand	1993	2002	-32.3	118.9	-90.5	47.6	23.5	-67
Armenia	1998	2007	-32.3	-84.8	-30.7	90.5	33	2.3
Canada	1997	2006	-30.8	138.6	-112.4	53.1	31.1	-81.3
Mean			**-53.0**	**49.9**	**-53.3**	**52.8**	**53.8**	**0.6**
Median			**-38.9**	**49.7**	**-39.1**	**49.6**	**37.9**	**-11.8**
25th percentile			**-57.3**	**29.2**	**-76.1**	**34.5**	**22.4**	**-44.7**
75th percentie			**-33.0**	**90.4**	**-25.4**	**69.2**	**77.6**	**46.3**
Max			**-30.8**	**157.8**	**-6.5**	**131**	**184.3**	**154.4**
Min			**-130.7**	**-121.3**	**-179.7**	**14.3**	**-8.3**	**-122.9**

Source: Deutsche Bank Research, Eichengreen and Esteves (2022)

On average across these economies, debt consolidation is explained roughly equally by improvements in the primary budget balance and stronger real economic growth. These two factors account for nearly 100% of the debt reduction on average across economies in this sample. That said, there is

substantial variation across experiences. Indeed, the 25th percentile of experiences suggest that the primary budget and real growth may only have explained about 2/3 of debt reduction, versus roughly 100% on average. Consistent with this finding, the 75th percentile for the real interest rate explained nearly half of debt reduction, versus an average near zero.

The international experience therefore largely confirms the conclusion from the post-WWII US debt reduction: budget policies and real economic growth are the most likely paths to bring down debt. However, the international evidence also suggests multiple paths are possible, and higher inflation combined with lower interest rates / financial repression has been successful in some instances.

The outlook

In this section we leverage the preceding analysis to assess how each of the levers might help to put US debt-to-GDP on a more sustainable trajectory. As a starting point, we compare the current US economy to the economic facts over the period 1946 to 1974 when debt-to-GDP was previously tamed. We divide the earlier episode into two sub periods where the drivers of debt reduction differed.

Relative to those earlier periods, economic growth is slower, inflation and interest rates are at the upper end, and the budget deficit is substantially wider. Thus the starting point for repeating the earlier experience of remarkable deficit reduction is thus not particularly promising.

In addition to the higher starting point for budget deficits, the composition of government spending could prove more intractable than in the past. In 1967 near the peak of the Vietnam War, discretionary spending accounted for 68% of federal outlays while mandatory spending was only 26% (net interest 7%). As of 2024, those shares reversed with mandatory spending making up 61% of outlays and discretionary 27% (net interest ~13%).

Nonetheless, we assess the potential for each of these levers to help reduce US debt over the coming years.

Figure 8: Macro fundamentals are currently far less favorable for debt reduction

	Change in debt-to-GDP	Real GDP growth	Nominal GDP growth	Headline CPI inflation	Treasury 10-year yield	Fed funds rate	Fiscal deficit/surplus
1946-1956	-55.4	4.2	6.9	2.3	2.8	1.8	-0.2
1957-1974	-24.1	3.7	7.1	3.4	5.1	4.7	-0.9
Current	97.8	2.8	5.3	3.0	4.2	5.1	-6.4

Source: Deutsche Bank Research, Note: Figures represent average over the period specified. For current that is 2024.

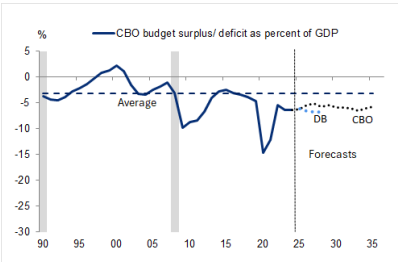
Budget deficits

The starting point for US budget deficits is discouraging for debt consolidation. The baseline forecast from the CBO is even gloomier, with the budget deficit-to-GDP ratio set to remain elevated between 5-7% over the next decade. Note that these projections were compiled before the OBBBA and assume that TCJA provisions would have expired as previously legislated. Our own baseline projections are somewhat worse than the CBO's.

Underlying these estimates are projections for historically elevated outlays as a share of GDP, which more than offset government revenues that are anticipated to remain somewhat above historical averages relative to GDP. On the expenditures side, mandatory spending is set to rise as a share of GDP and net interest costs are projected to hit record highs as discretionary spending

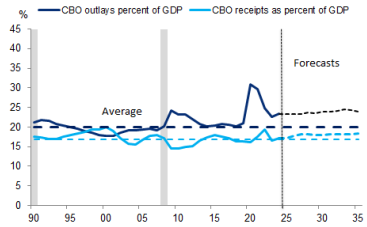
declines to record lows as a share of GDP. The breakdown in spending highlights the challenge of reducing debt through this channel – most of the incremental spending is on politically difficult items like health care programs that reflect an aging population or on net interest costs which are the natural byproduct of elevated debt and market-determined interest rates.

Figure 9: Budget deficit projected to remain historically wide



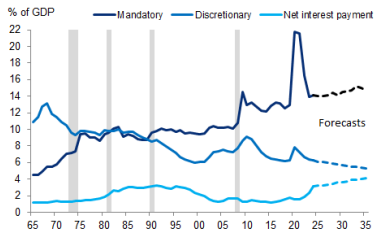
Source : CBO, Haver Analytics, Deutsche Bank Research

Figure 10: Most importantly driven by elevated outlays



Source: CBO, Haver Analytics, Deutsche Bank Research

Figure 11: Figure 11: Which in turn are driven by mandatory items and net interest



Source : CBO, Haver Analytics, Deutsche Bank Research

There are some reasons to think these projections represent best case scenarios. As detailed earlier, the CBO has tended to underestimate deficits for much of the past three decades. Moreover, these projections are underpinned by a few sanguine assumptions, including the absence of recessions, the expiration of tax cuts as legislated, and lower market interest rates than we would assume (more on this last point later). Additionally, there has been a rising Congressional reliance on "emergency" expenditures, which fall outside of the normal budget process. As one recent paper has estimated, between 1992 and 2023, Congress provided $11.4 trillion in emergency budget authority.[2]

That is not to say that progress cannot be made on stabilizing debt through fiscal policies. Indeed, the CBO regularly publishes options for reducing the deficit. The latest vintage of this publication detailed 76 options for policies aimed at deficit reduction (see the latest here). Some of these policies would reduce the deficit by trillions of dollars over a decade. The Government Accountability Office (GAO) also regularly publishes suggestions for ways to rein in government spending through greater efficiency, reduction of fraud, and other measures. Their latest report on the topic detailed 148 new ways to reduce spending over time (see here).

Options to reduce the deficit through changes in tax and spending policies are therefore abundant. What is in question is whether politics will allow these actions to be taken. Our conclusion from recent experience in Washington is that changes to fiscal policies that bring about meaningful deficit reduction appear unlikely unless forced by market dynamics.

Real economic growth

If changes in fiscal policies appear unlikely to reduce US debt, absent a push from the market, what about stronger economic growth?

The most likely channel for organically stronger growth over the coming years is AI-driven productivity gains. Estimates of this effect vary substantially, as shown in Figure 12. However, a rough midpoint of the estimates from the literature,

[2] Boccia, Romina, and Dominik Lett. "Curbing Federal Emergency Spending: Government Spending Grows with Excessive and Wasteful Emergency Designations," Policy Analysis no. 966, Cato Institute, Washington, DC, January 9, 2024.

which is consistent with the mid-point of estimates from Aghion and Bunal (2024), is that AI could lift productivity by 0.5-0.75pp per year.

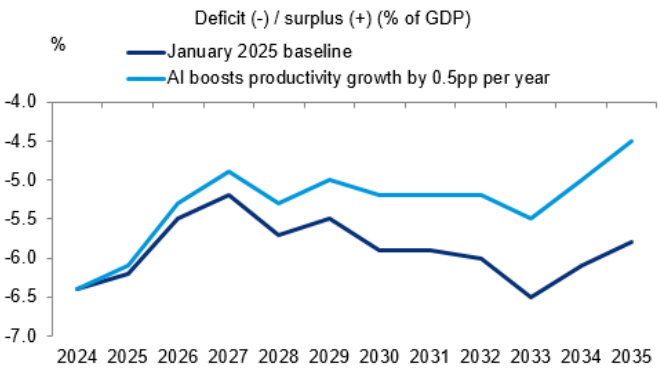
Figure 12: AI likely to lift US productivity growth by 0.5-0.75pp per year according to central tendency of estimates

AI impact on annual productivity growth:	
Publications	**Findings**
Baily et al. (2023)	1.7%
Acemoglu (2024)	0-0.1%
Filippucci et al. (2024)	0.25-0.60pp
Aghion and Bunel (2024)	
-Historical comparison	0.8-1.3pp
-Task-based framework	0.68pp

Source : Baily et al. (2023), Acemoglu (2024), Filippucci et al. (2024), Aghion and Bunel (2024), Deutsche Bank Research

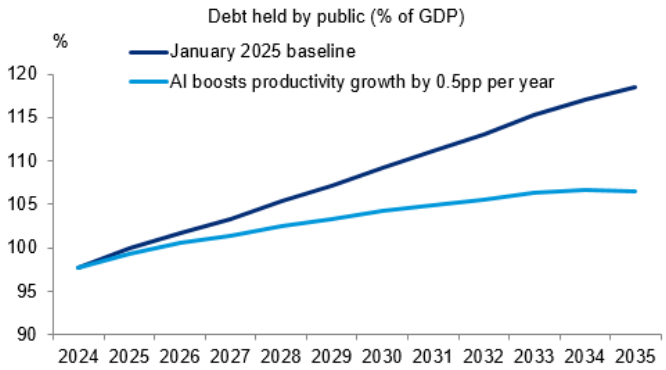
We use these estimates of AI's impact and a spreadsheet provided by the CBO to derive the expected impact on US deficits and debt (see CBO spreadsheet here). According to the CBO's framework, every 0.1 percentage point boost to annual productivity growth shaves about $500bn cumulatively from the deficit over the next 10 years and reduces debt-to-GDP by nearly 2.5 percentage points over the 10-year window. A 0.5 percentage point annual boost to productivity growth, which would be broadly in line with the mid-point estimates just presented, would therefore trim nearly $2.5tn total from the deficit through 2035. That impact would reduce debt held by the public as a percent of GDP from 118.5% at the end of the 10-year window to 106.5%.

Figure 13: Budget deficit would be meaningfully smaller – but still elevated -- with stronger AI-driven growth



Source : CBO, Deutsche Bank Research

Figure 14: Debt-to-GDP would still edge higher with stronger AI-driven growth



Source : CBO, Deutsche Bank Research

Based on this analysis, if AI results in productivity growth that is 0.5 percentage points per year stronger than otherwise, US deficits and debt would be meaningfully lower than in the baseline. However, budget deficits would still remain historically elevated as a share of GDP, between 5% and 5.5% for much of the next decade, and debt-to-GDP would still be near record high levels close to 105% by 2035.

Better outcomes for US debt would therefore either require more aggressive assumptions about how AI would lift productivity growth – which is plausible, though not guaranteed. A more robust approach would likely be to complement

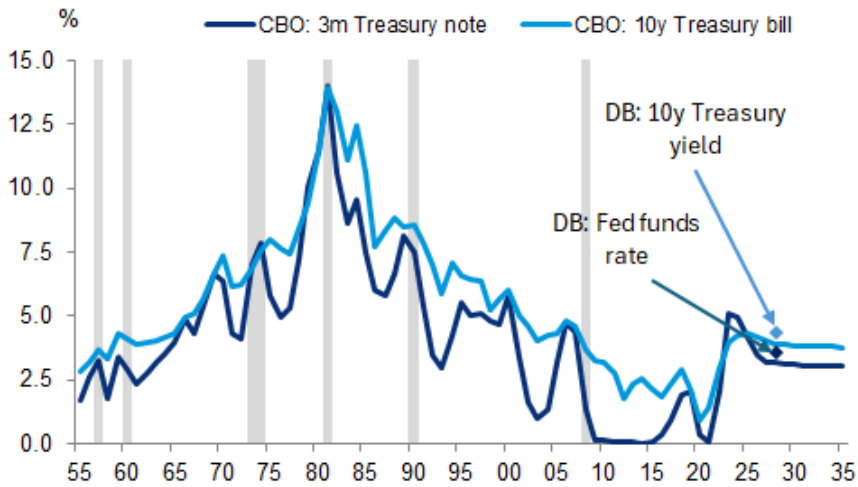
fiscal gains from AI-driven productivity growth with other forces, including deficit reduction.

Interest rates / financial repression

Given the rising importance of elevated net interest costs in determining the trajectory of US deficits and debt, it is natural to consider ways in which interest rates could be kept low to help defray the impact on the federal budget.

To benefit the budget outlook, interest rates must come in lower than the assumptions that underlie those projections. Importantly, the CBO's budget projections already build in a fair amount of interest rate normalization (i.e., lower yields) over the coming years. In particular, the CBO assumes that by 2027 the yield curve has mostly converged back to its longer-run structure, with short rates in the 3-3.25% range and the 10-year Treasury yield falling in the 3.75-4% range. Both of these assumptions may be too optimistic from a budget perspective.

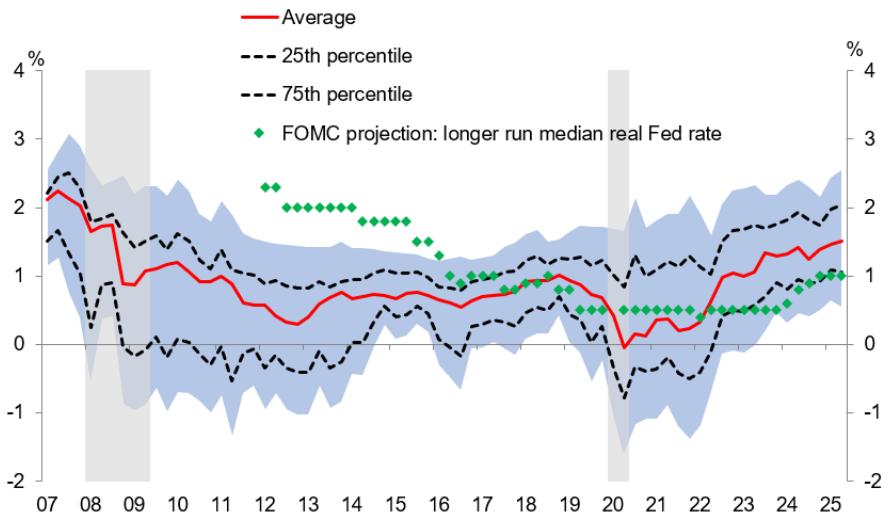
Figure 15: DB estimates for the yield curve above CBO assumptions



Source: CBO, Haver Analytics, Deutsche Bank Research.

Although the 3-month Treasury yield assumption is broadly consistent with the Fed's estimate of the longer-run level of the fed funds rate, it is well below the average of indicators we track as part of our r-star suite. These variables have signaled a real neutral fed funds rate in the 1.5-1.75% range for much of the past two years, consistent with 3.5-3.75% in nominal terms. As such, we see upside risk to the CBO's assumption around short rates.

Figure 16: Long-term real fed funds rate has likely moved higher



Source: FRBNY, Federal Reserve Board, Federal Reserve Bank of Richmond, Cleveland Fed, Haver Analytics, Bloomberg Finance LP, Deutsche Bank Research.

We see similar risks to the projection of the 10-year Treasury yield, at least over the next few years. Forces that will likely keep term premia and long-end yields at higher levels include: elevated inflation and inflation risks, elevated primary budget deficits in the US and a shift towards fiscal expansion globally, a rise in global bond yields with spillovers to the US, and a decline in Treasuries held by price insensitive investors.

Our baseline is therefore that, if anything, the CBO yield curve assumptions are optimistic. But what impact would it have if yields come in lower and how might an administration affect that outcome?

First, on how might lower yields be achieved. As we wrote earlier this year, there are several paths towards achieving this (see "How could Trump lower 10-year yields?"). The first is through impacting fundamental variables like the budget deficit, inflation and oil prices. Bringing these variables lower on a sustainable basis would help to lower yields across the curve. So far at least, limited progress has been made in this area, and as outlined, the baseline is for no progress on substantially reducing primary deficits.

The second is focused on policies that impact supply and demand for US Treasuries. In previous work, we derived a condition which suggests debt sustainability is really determined by the "dark matter" of the yield curve – term premia and the "other factors" component of r-star. These variables are difficult to identify and mostly reflect the balance between supply and demand for US Treasury debt (see "The dark matter determining debt stability"). In this context, any policies that do not directly work on these two variables is unlikely to sustainably shift debt dynamics in the US.

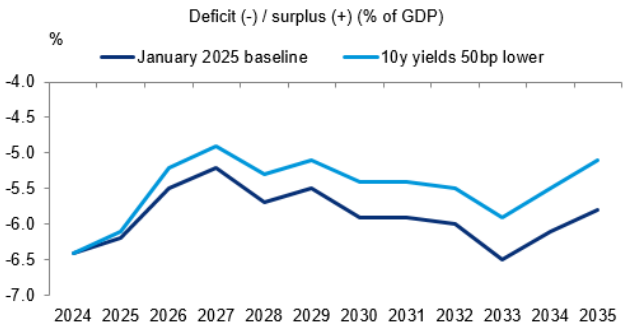
Related to supply, the Treasury Department seems likely to eschew increases in coupon issuance and allow the bill share of total outstanding debt to rise ahead. That is expected and is likely already reflected in current market yields to a large extent. In addition, regulatory changes, such as tweaks to the supplementary leverage ratio (SLR), should help to free up bank balance sheet capacity to hold more Treasuries directly or indirectly through intermediation (see Fixed Income Blog: Thoughts on the Fed's SLR reform proposal). Finally, recent legislation passed to address stable coins could spur additional demand for Treasury

issuance (see Fixed Income Blog: Stablecoins, Treasury demand, and the reshuffling of money).

These measures should be largely reflected in market pricing given that the Fed has presented options for changes. Moreover, there is the potential for foreign demand for US Treasuries to wane. As such, it is unlikely that these levers will lead to a large and sustained decline in bond yields. That would leave more impactful changes that we currently view as less likely, such as a clear shift towards fiscal dominance in the US that would lead the Fed to more regularly and actively use its balance sheet to keep government borrowing costs low.

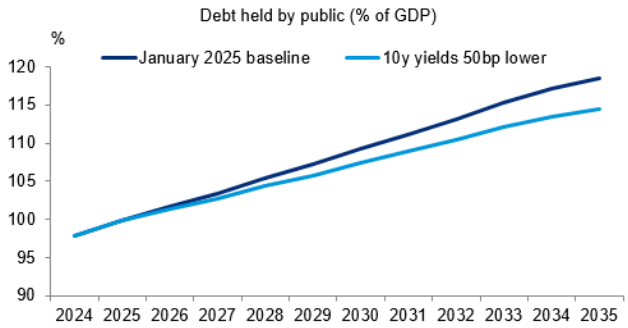
How much would yields have to fall for it to matter? We turn again to the CBO's spreadsheet for this counterfactual. We consider a 50bp reduction in 10-year Treasury yields relative to the CBO's projections, which would leave 10-year yields between 3.25% and 3.5% for much of the next decade – levels that we view as possibly 100bps below the more likely path for rates over this period. These lower yields would reduce the deficit by a cumulative $1.8tn over the next decade, which would leave debt-to-GDP at 114.4% in 2035, about 4 percentage points lower than the baseline.

Figure 17: 50bps lower 10-year yields would shave a few percentage points from the deficit



Source: CBO, Deutsche Bank Research

Figure 18: But will not forestall the climb higher in debt-to-GDP over the next decade



Source: CBO, Deutsche Bank Research

The conclusion is that financial repression may help, but by itself, it is unlikely to significantly move the needle on US debt sustainability.

Inflation

Inflation is the least likely channel to achieve meaningful deficit reduction in the US for a variety of reasons.

First, recent experience with an inflation shock has shown that the US population is very sensitive to higher prices and inflation is politically unpopular. As a result, achieving debt erosion through a sustained period of elevated inflation could lead to a change in political power towards another party committed to bringing inflation lower.

Second, as detailed earlier in this note, US experience after WWII and international empirical evidence suggests that inflation is not a reliable contributing factor to reducing debt loads over time. This empirical finding aligns with our theoretical work on the topic.

Third, our research has shown that inflation can only erode debt levels if it is unexpected and does not get reflected in market inflation expectations and interest rates (see "The dark matter determining debt stability"). Anticipated inflation leads to higher borrowing costs and does not provide fiscal benefits. After emerging from such a prominent price shock, we do not think interest rates will be insensitive to another bout with inflation.

When will it matter to the market?

For the past several decades economists and policymakers have warned of an unsustainable US fiscal trajectory with seemingly little impact on fiscal decision making. It has become a ritual for Chairs of the Federal Reserve to warn Congress of the perilous fiscal path that lies ahead. At times the market has revolted, such as during the summer and early fall of 2023, when 10-year Treasury yields hit 5% for the first time in nearly two decades. But it hasn't taken much response from policymakers to alleviate market fears; two years ago it was Treasury issuing a little less at the long end than anticipated and the Fed pivoting in a dovish direction. By year end 10-year yields were back below 4%.

It is impossible to know when the market will begin to internalize this trajectory in a more sustainable way. There is no ex ante tipping point, so to speak, beyond which bond vigilantes conspire to push borrowing costs higher.

But at the risk of saying "this time is different", there are reasons to think the deteriorating fiscal picture could become a bigger concern for the market over the next decade. For example, the Old Age and Survivors Insurance (OASI) trust fund is projected to be depleted by 2033. If no action is taken by Congress ahead of time to sure up the finances of the OASI trust fund, social security would need to be paid out of current tax receipts, resulting in an immediate ~20% reduction to payments for all retirees.

A similar crisis unfolded in 1983 as a combination of high inflation in the late 70s and early 80s along with a severe recession led to lower-than-expected payroll tax revenue and higher-than-expected cost-of-living adjustments (COLAs). At the time, Congress passed the Social Security Amendments of 1983. These tax and spending changes were the result of a bipartisan commission (the Greenspan Commission), and included 1.) an accelerated increase in the payroll tax, 2.) subjecting a portion of social security income to federal income tax for higher income beneficiaries, 3.) a gradually phased in increase in the retirement age from 65 – 67 and 4.) a 1-yr delayed COLA adjustment. These measures stabilized the fund and allowed it to build up reserves over the next several decades as the baby boomer generation entered the work force en masse.

With the baby boomers now retiring, the finances of the OASI trust fund are once again deteriorating rapidly, and the longer it goes unaddressed, the larger the fiscal adjustment needed to put the fund back on a sustainable path. Indeed, the temporary tax cuts in the OBBBA have likely brought the date of the trust fund exhaustion forward to 2032 according to independent estimates. In short, major fiscal reforms will be needed within the next decade, regardless of whether productivity outperforms or interest rates are held down by fiscal repression.

Conclusion

US debt-to-GDP has neared the record highs set more than 80 years ago in response to WWII. In the decades that followed that earlier debt build, the US underwent a remarkable debt consolidation that saw debt-to-GDP reduced by roughly 80 percentage points. Is it possible to repeat that experience?

The starting point is not encouraging. Baseline projections anticipate that the federal budget deficit is likely to remain historically high over the years ahead, with elevated spending on challenging items like health care and net interest costs taking up a larger share of GDP. By extension, baseline forecasts see US debt-to-GDP climbing ever higher, exceeding current levels of debt-to-GDP by about 50 percentage points.

Historical experience in the US and abroad suggests that the most reliable path towards debt consolidation runs through two channels: (1) fiscal policy changes for revenues and expenditures that reduce deficits / increase surpluses and (2) strong real economic growth. While the former does not appear forthcoming absent a strong push from markets, the latter is possible given prospects for an AI-driven pickup in productivity growth over the years ahead. However, in isolation, stronger growth is more likely to slow the creep higher in debt than lead to a sharp reversal in the trajectory.

Among the alternative levers to help reduce debt, we see some form of financial repression as most likely. The administration has discussed some related measures, including focusing Treasury issuance at the front of the curve and opening up domestic bank demand for Treasury debt through regulatory easing. But so far the most impactful tool – using the Fed's balance sheet to keep rates artificially low as was done in the 1940s and 1950s – seems unlikely. Without that tool, our analysis suggests that meaningful changes to tax and spending policy will likely be needed to reverse the worrying trajectory of government debt-to-GDP. But to get there, we will first need to see a push from the markets.

Appendix 1

This material has been prepared by the Deutsche Bank Research Institute and is provided to you for general information purposes only. The Institute leverages the views, opinions, and research from Deutsche Bank Research, economists, strategists, and research analysts. Accordingly, you should assume that content in this document is based on or was previously published and provided to Deutsche Bank clients who may have already traded on the basis of it.

Any views or estimates expressed in this material reflect the current views of the author(s) and may differ from the views and estimates of Deutsche Bank AG, its affiliates, other Deutsche Bank personnel, and other materials published by Deutsche Bank. The content in this material is valid as of the date shown on the first page and may change without notice. Deutsche Bank has no obligation to provide any updates or changes to the information herein.

This material should not be used as a basis for trading securities or other financial products and should not be considered to be a recommendation or individual investment advice for any particular person. It does not constitute an offer, solicitation, or an invitation by or on behalf of Deutsche Bank to any person to buy or sell any security or financial instrument. Nothing in this material constitutes investment, legal, accounting or tax advice. Deutsche Bank engages in securities transactions, including on a proprietary basis, and may do so in a manner inconsistent with the views or information expressed in this material.

While information in this material has been obtained from sources believed to be reliable, neither Deutsche Bank AG nor any of its affiliates makes any representation or warranty, express or implied, as to the accuracy or completeness of the statements or any information contained in this material and therefore any liability is expressly disclaimed. This material is provided without any obligation, whether contractual or otherwise. Information regarding past transactions or performance is not indicative of future results.

In the U.S. this report is approved and/or distributed by Deutsche Bank Securities Inc., a member of FINRA. In Germany this information is approved and/or communicated by Deutsche Bank AG Frankfurt, licensed to carry on banking business and to provide financial services under the supervision of the European Central Bank (ECB) and the German Federal Financial Supervisory Authority (BaFin). In the United Kingdom this information is approved and/or communicated by Deutsche Bank AG, London Branch, a member of the London Stock Exchange, authorized by UK's Prudential Regulation Authority (PRA) and subject to limited regulation by the UK's Financial Conduct Authority (FCA) (under number 150018) and by the PRA. This information is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. and in Singapore by Deutsche Bank AG, Singapore Branch. In Japan this information is approved and/or distributed by Deutsche Securities Limited, Tokyo Branch. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product.

By accessing this material, you agree that its content may not be reproduced, distributed or published by any person for any purpose, in whole or part, without Deutsche Bank's prior written consent. You also agree that you shall not scrape, extract, download, upload, sell or offer for sale any of the content in this material, and you agree not to use, or cause to be used, any computerized or other manual or automated program or mechanism, tool, or process, including any scraper or spider robot, to access, extract, download, scrape, data mine, display, transmit, or publish, any of the content in this material.

Deutsche Bank
Research Institute